What is claimed is:

1. A zoom lens comprising:

a lens unit located at a most object-side position; and

a moving lens unit with positive refracting power, located on an image side of the lens unit,

the lens unit including a single positive lens and the moving lens unit being simply moved toward an object side when a magnification of the zoom lens is changed in a range from a wide-angle position to a telephoto position so as to satisfy the following condition:

$$0.8 < y_{07} / (fw \cdot \tan \omega_{07w}) < 0.96$$

where fw is a focal length of an entire system of the zoom lens at the wide-angle position, y_{07} is an image height expressed by $0.7 \times y_{10}$, where y_{10} is a distance from a center to a point farthest therefrom on an effective imaging surface of an electronic image sensor, and ω_{07w} is an angle made by a direction of an object point with an optical axis, where the object point corresponds to an image point that is at the point y_{07} away from the center on the effective imaging surface of the electronic image sensor at the wide angle position.

2. A zoom lens according to claim 1, further comprising an aperture stop interposed between the lens unit and the moving lens unit to satisfy the following condition:

$$0.4 < \log \gamma B / \log \gamma < 4.0$$

where $\gamma = fT / fw$ (where fT is a focal length of the entire system of the zoom lens at the telephoto position) and γB = a magnification of the moving lens unit at the telephoto position / a magnification of the moving lens unit at the wide-angle position.

3. A zoom lens according to claim 1, wherein the lens unit includes at least one

cemented lens component of a positive lens and a negative lens, arranged in this order from the object side.

4. A zoom lens according to claim 1, wherein the lens unit includes at least one optical element with negative refracting power and the optical element has at least one aspherical surface.

5. A zoom lens according to claim 1, wherein the lens unit includes an optical element with negative refracting power at a most object-side position and satisfies the following condition:

$$-1.5 < (R11 + R12) / (R11 - R12) < 1.1$$

where R11 is a radius of curvature of an entrance surface of the optical element and R12 is a radius of curvature of an exit surface of the optical element.

6. A zoom lens according to claim 1, wherein the lens unit and the aperture stop are fixed when the magnification is changed.

7. A zoom lens according to claim 1, wherein the lens unit includes a reflecting optical element provided with a reflecting surface.

8. A zoom lens according to claim 7, wherein a most object-side surface of the reflecting optical element is concave.

9. A zoom lens according to claim 8, wherein the lens unit includes a positive lens, having positive refracting power as a whole.

10. A zoom lens according to claim 7, wherein an entrance surface of the reflecting optical element is configured as an aspherical surface that divergence is impaired

progressively in going from the optical axis to a periphery.

11. A zoom lens according to claim 7, satisfying the following condition:

$$0.3 < d_F / d_P < 0.7$$

where d_F is a distance from an intersection of a most object-side surface of the lens unit with the optical axis to an intersection of the reflecting surface with the optical axis and d_P is a distance from an intersection of a most object-side refracting surface relative to the reflecting surface with the optical axis to an intersection of a most image-side refracting surface relative to the reflecting surface with the optical axis.

12. A zoom lens according to claim 1, having a lens unit with negative refracting power located adjacent to the lens unit, on the image side of the lens unit, wherein the lens unit with negative refracting power includes a negative lens and a positive lens.

13. A zoom lens according to claim 1, having a lens unit with negative refracting power located adjacent to the lens unit, on the image side of the lens unit, wherein an aperture stop is interposed between the lens unit with negative refracting power and the moving lens unit.

14. An electronic imaging apparatus comprising:

a zoom lens;

an electronic image sensor; and

an image processing unit,

the zoom lens comprising:

a lens unit located at a most object-side position; and

a moving lens unit with positive refracting power, located on an image side of the lens unit,

the lens unit including a single positive lens and the moving lens unit being simply moved toward an object side when a magnification of the zoom lens is changed in a range from a wide-angle position to a telephoto position so as to satisfy the following condition:

$$0.8 < y_{07} / (fw \cdot \tan \omega_{07w}) < 0.96$$

where fw is a focal length of an entire system of the zoom lens at the wide-angle position, y_{07} is an image height expressed by $0.7 \times y_{10}$, where y_{10} is a distance from a center to a point farthest therefrom on an effective imaging surface of an electronic image sensor, and ω_{07w} is an angle made by a direction of an object point with an optical axis, where the object point corresponds to an image point that is at the point y_{07} away from the center on the effective imaging surface of the electronic image sensor at the wide angle position,

the image processing unit having steps that image data imaged by the electronic image sensor are electrically processed and contour thereof is changed.

15. A zoom lens comprising:

a first lens unit with positive refracting power, located at a most object-side position;

a second lens unit with negative refracting power, located on an image side of the first lens unit; and

a third lens unit with positive refracting power, located on the image side of the second lens unit,

wherein the first lens unit has two aspherical surfaces, and when a magnification of the zoom lens is changed in a range from a wide-angle position to a telephoto position, the second lens unit is moved and the third lens unit is simply moved toward an object side.

16. A zoom lens comprising:

a first lens unit with positive refracting power, located at a most object-side position;

a second lens unit with negative refracting power, located on an image side of the first lens unit; and

a third lens unit with positive refracting power, located on the image side of the second lens unit,

wherein the first lens unit and the second lens unit have four aspherical surfaces, and when a magnification of the zoom lens is changed in a range from a wide-angle position to a telephoto position, the second lens unit is moved and the third lens unit is simply moved toward an object side.

17. A zoom lens comprising:

a first lens unit with positive refracting power, located at a most object-side position;

a second lens unit with negative refracting power, located on an image side of the first lens unit; and

a third lens unit with positive refracting power, located on the image side of the second lens unit,

wherein each of the first lens unit and the second lens unit has two aspherical surfaces, and when a magnification of the zoom lens is changed in a range from a wide-angle position to a telephoto position, the second lens unit is moved and the third lens unit is simply moved toward an object side.

18. A zoom lens comprising:

a first lens unit with positive refracting power, located at a most object-side position;

a second lens unit with negative refracting power, located on an image side of the first lens unit; and

a third lens unit with positive refracting power, located on the image side of the second lens unit,

wherein the second lens unit and the third lens unit have four aspherical surfaces, and when a magnification of the zoom lens is changed in a range from a wide-angle position to a telephoto position, the second lens unit is moved and the third lens unit is simply moved toward an object side.

19. A zoom lens comprising:

a first lens unit with positive refracting power, located at a most object-side position;

a second lens unit with negative refracting power, located on an image side of the first lens unit; and

a third lens unit with positive refracting power, located on the image side of the second lens unit,

wherein each of the second lens unit and the third lens unit has two aspherical surfaces, and when a magnification of the zoom lens is changed in a range from a wide-angle position to a telephoto position, the second lens unit is moved and the third lens unit is simply moved toward an object side.

20. A zoom lens according to claim 15, wherein the first lens unit includes, in order from the object side along an optical path, an optical element of divergence and a positive lens.

21. A zoom lens according to claim 15, wherein the second lens unit includes, in order from the object side along an optical path, a biconcave lens and a positive lens.

22. A zoom lens according to claim 15, wherein the third lens unit includes, in order from the object side along an optical path, a single positive lens and a cemented

lens component of a positive lens and a negative lens with a concave surface of strong power facing the image side.

23. A zoom lens according to claim 15, wherein a lens unit which is movable for focusing is placed on the image side of the third lens unit.

24. A zoom lens according to claim 15, wherein a most object-side lens unit is substantially fixed with respect to an image plane.

25. A zoom lens according to claim 20, wherein the first lens unit is substantially fixed with respect to an image plane, and the optical element is a prism having an entrance surface and an exit surface so that the entrance surface is configured as a concave surface that divergence is impaired progressively in going from an optical axis to a periphery.

26. A zoom lens according to claim 15, wherein an aperture stop fixed with respect to an image plane is interposed between the second lens unit and the third lens unit, and one prism and three or less single lenses are arranged on the object side of the aperture stop.

27. A zoom lens according to claim 15, wherein the second lens unit and the third lens unit are adjacent to each other, with an aperture stop between the second lens unit and the third lens unit, and satisfy the following condition:

$$0.50 < D3 / D2 < 1.40$$

where D2 is a distance, measured along an optical axis, from a vertex of a most image-side surface of the second lens unit to the aperture stop at the wide-angle position and D3 is a distance, measured along the optical axis, from the aperture stop to the vertex of a most object-side surface of the third lens unit at the wide-angle posi-

tion.

28. A zoom lens according to claim 15, satisfying the following condition:

$$0.75 < y_{07} / (fw \times \tan \omega_{07w}) < 0.96$$

where fw is a focal length of an entire system of the zoom lens at the wide-angle position, y_{07} is an image height expressed by $0.7 \times y_{10}$, where y_{10} is a distance from a center to a point farthest therefrom on an effective imaging surface of an electronic image sensor, and ω_{07w} is an angle made by a direction of an object point with an optical axis, where the object point corresponds to an image point that is at the point y_{07} away from the center on the effective imaging surface of the electronic image sensor at the wide angle position.

29. A zoom lens according to claim 28, satisfying the following condition:

$$1.0 < fw / y_{10} < 2.1$$

30. An electronic imaging apparatus comprising:

a zoom lens;

an electronic image sensor; and

an image processing unit,

the zoom lens comprising:

a first lens unit with positive refracting power, located at a most object-side position;

a second lens unit with negative refracting power, located on an image side of the first lens unit; and

a third lens unit with positive refracting power, located on the image side of the second lens unit,

wherein the first lens unit has two aspherical surfaces, and when a magnification of the zoom lens is changed in a range from a wide-angle position to a telephoto po-

sition, the second lens unit is moved and the third lens unit is simply moved toward an object side,

the image processing unit having steps that image data imaged by the electronic image sensor are electrically processed and contour thereof is changed.

31. A zoom lens comprising:

a first lens unit with positive refracting power, located at a most object-side position;

a second lens unit with negative refracting power, located on an image side of the first lens unit; and

a third lens unit with positive refracting power, located on the image side of the second lens unit,

wherein the first lens unit has a reflecting surface, and when a magnification of the zoom lens is changed in a range from a wide-angle position to a telephoto position, the second lens unit is moved and the third lens unit is simply moved toward an object side to satisfy the following conditions:

$$-1.0 \leq \beta 2W \leq -0.40$$

$$-1.0 \leq \beta 3W \leq -0.40$$

where $\beta 2W$ is the magnification of the second lens unit at the wide-angle position and $\beta 3W$ is the magnification of the third lens unit at the wide-angle position.

32. A zoom lens according to claim 31, wherein an entrance surface of an optical element and one surface of a positive lens are configured as aspherical surfaces that curvature is moderated progressively in going from an optical axis to a periphery.

33. A zoom lens according to claim 31, wherein a negative lens of the second lens unit and a positive lens of the third lens unit have aspherical surfaces.

34. An electronic imaging apparatus comprising:

a zoom lens;

an electronic image sensor; and

an image processing unit,

the zoom lens comprising:

the zoom lens comprising:

a first lens unit with positive refracting power, located at a most object-side position;

a second lens unit with negative refracting power, located on an image side of the first lens unit; and

a third lens unit with positive refracting power, located on the image side of the second lens unit,

wherein the first lens unit has a reflecting surface, and when a magnification of the zoom lens is changed in a range from a wide-angle position to a telephoto position, the second lens unit is moved and the third lens unit is simply moved toward an object side to satisfy the following conditions:

$$-1.0 \leq \beta 2W \leq -0.40$$

$$-1.0 \leq \beta 3W \leq -0.40$$

where $\beta 2W$ is the magnification of the second lens unit at the wide-angle position and $\beta 3W$ is the magnification of the third lens unit at the wide-angle position.

the image processing unit having steps that image data imaged by the electronic image sensor are electrically processed and contour thereof is changed.